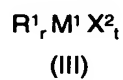
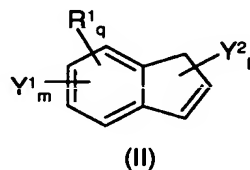
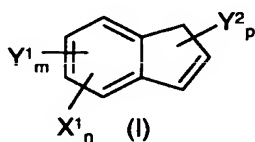


Abstract

The present invention relates to a simple process for preparing alkyl-substituted indenenes of the formula (II) in improved yields from indenenes of the formula (I) by reaction with compounds of the formula (III), to the alkyl-substituted indenenes prepared in this way and to the use of these for the preparation of metallocenes for highly active polymerization catalysts.



(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



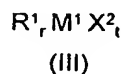
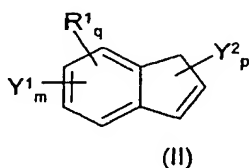
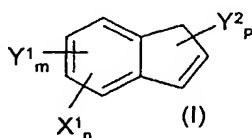
(43) International Publication Date
16 October 2003 (16.10.2003)

PCT

(10) International Publication Number
WO 03/084904 A1

- (51) International Patent Classification⁷: C07C 13/465, 1/32, C08F 4/64
- (21) International Application Number: PCT/EP03/03562
- (22) International Filing Date: 5 April 2003 (05.04.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
102 15 849.5 10 April 2002 (10.04.2002) DE
60/399,761 31 July 2002 (31.07.2002) US
- (71) Applicant (for all designated States except US): BASELL
POLYOLEFINE GMBH [DE/DE]; Brühler Strasse 60,
50389 Wesseling (DE).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): SCHULTE, Jörg,
L. [DE/DE]; Konrad-Brosswitz-Str. 32, 60487 Frankfurt
(DE). BINGEL, Carsten [DE/DE]; Müdichstr. 30, 67105
Schifferstadt (DE). SCHOTTEK, Jörg [DE/DE]; Mühl-
gasse 3, 60486 Frankfurt (DE).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE,
SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,
VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report
— before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments
- For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: PREPARATION OF SUBSTITUTED INDENES



(57) Abstract: The present invention relates to a simple process for preparing alkyl-substituted indenenes of the formula (II) in improved yields from indenenes of the formula (I) by reaction with compounds of the formula (III), to the alkyl-substituted indenenes prepared in this way and to the use of these for the preparation of metallocenes for highly active polymerization catalysts (I), (II), (III).